PATENT Case 5400/2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF	
S. BERTENSHAW ET AL	GROUP ART UNIT: 120
SERIAL NO.: 08/425,022	EXAMINER: DENTZ
FILED: April 19, 1995	DATE: April 3, 1997

TITLE: SUBSTITUTED FURANS AND FURANONES FOR THE TREATMENT OF INFLAMMATION

DECLARATION UNDER 37 C.F.R. §1.132

The Commissioner of Patents and Trademarks
Washington, D.C. 20231

Dear Sir:

I, Peter Beak, Ph.D., declare that:

1. I received a Bachelor of Arts Degree in Chemistry from Harvard University in 1957; and received a Ph.D. in Organic Chemistry from Iowa State University in 1961;

2. Since 1961, I have been employed as a faculty member of the Department of Chemistry at the University of Illinois, Urbana, Illinois. Currently I hold the position of Roger Adams Professor of Chemistry and Jubilee Professor of Arts and Sciences and I direct scientists carrying out research in physical organic chemistry;

3. I am the principal author or co-author of approximately 170 publications, with several publications on tautomeric principles, and specifically, tautomerism in heterocyclic compounds;

4. In my professional capacities, I closely and carefully follow the scientific literature regarding organic chemistry and specifically organic heterocyclic chemistry;

5. As a professor of chemistry at the University of Illinois with teaching responsibilities for undergraduate and graduate students, I am aware of what constitutes ordinary skill and knowledge in the art of heterocyclic chemistry, including as it relates to tautomers. In this art it is well known and accepted that:

a. carbonyl-enol tautomerism exists where an enol (vinyl alcohol) form exists in equilibrium with one or more carbonyl forms,

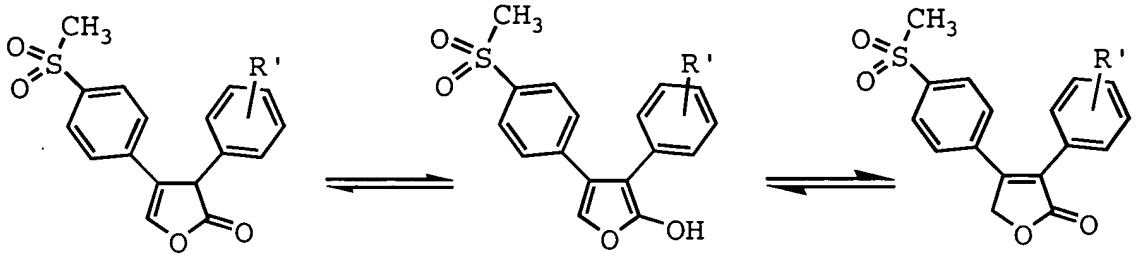
b. the carbonyl-enol tautomeric forms are interconvertable by transfer of a proton;

c. although one tautomeric form may predominate, in solution phase the carbonyl-enol tautomeric forms co-exist;

d. the carbonyl-enol tautomeric equilibrium is greatly affected by phase, solvent, concentration, pH, temperature and the presence of substituents (including those producing inductive, resonance, hydrogen bond-stabilizing or steric effects); and

e. a depiction of one carbonyl-enol tautomeric form embodies all carbonyl-enol tautomeric forms;

6. The structures shown below are tautomers of each other



carbonyl enol carbonyl ;

7. I have reviewed U.S. Patent Application Serial No. 08/004,822. The application describes hydroxyl-substituted 3,4-diarylfurans (pages 2-3);

8. Based on my analysis, I believe one of ordinary skill in this art, including as it relates to tautomers, would understand that U.S. Patent Application No. 08/004,822 describes both the 3,4-diaryl-2-hydroxyfuran enol and carbonyl forms;

I further declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing therefrom.

Respectfully submitted

Peter Beak, Ph.D.

Date

April 3, 1997